## ORIGINAL

Before the Federal Communications Commission Washington, D.C. 20054

ORIGINAL RECEIVED
FILE JUN - 5 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
Redevelopment of Spectrum to		ET Docket No. 92-9
Encourage Innovation in the	ý	
Use of New Telecommunications	)	
Technologies	)	

# COMMENTS OF VANGUARD CELLULAR SYSTEMS, INC.

## I. INTRODUCTION

Vanguard Cellular Systems, Inc. ("Vanguard") is the third largest "exclusive" non-wireline cellular provider in the United States, operating five cellular networks in the eastern United States. Vanguard's operations cover 21 markets (MSAs and RSAs) and bring state-of-the-art cellular services to approximately 75,000 customers. In providing point-to-point communications between microwave segments ("hops"), Vanguard makes extensive use of the 2 GHz<sup>IJ</sup> microwave frequencies under consideration in the Notice of Proposed Rule Making ("NPRM") in the above-captioned proceeding, ET Docket No. 92-9. Indeed, over 67% of Vanguard's hops are located in the 2 GHz Band. Vanguard estimates that relocating pursuant to the NPRM would cost Vanguard — a mid-sized cellular provider — approximately \$24 million. Because the actions proposed in the NPRM would materially impact Vanguard's operations, Vanguard offers the comments below.

List A B C D E

The Commission has proposed to displace current users of the private fixed microwave and common carrier bands comprising a total of 220 MHz in the spectrum between 1.85 and 2.20 GHz ("2 GHz Band").

## II. DISCUSSION

Vanguard applauds the Commission's effort to accommodate personal communication services ("PCS") and other emerging technologies. Vanguard would endorse a "well-informed" decision of the Commission to reallocate spectrum along the lines outlined in the NPRM. However, since the NPRM, and the OET Study<sup>2</sup> on which the NPRM is based, failed to consider the availability of federal government spectrum before deciding to oust the affected 2 GHz users, Vanguard is unable to give unequivocably the Commission its support.

Should the Commission ultimately decide that it has no alternative but to reallocate the 2 GHz Band to emerging technologies, it should modify the <u>NPRM</u> as set forth below in Section II.B.

# A. The Commission Must Investigate The Availability Of Federal Government Frequencies For Emerging Technologies

Citing the Emerging Telecommunications Technologies Act,<sup>3</sup> legislation currently pending in Congress that would <u>require</u> NTIA to reallocate federal government spectrum for emerging technologies, the <u>NPRM</u> acknowledges that the Commission did not consider U.S. government spectrum for emerging technologies due to "the delay and uncertainty" in reallocating spectrum under the jurisdiction of NTIA. <u>NPRM</u> at ¶ 11. The

<sup>2/</sup> See "Creating New Technology Bands for Emerging Telecommunications Technology" FCC/OET TS 91-1 (January, 1992).

<sup>3/</sup> See H.R. 531, 102d Cong., 1st Sess. (passed July 9, 1991, by the House of Representatives) (137 Cong. Rec. H 5272 (1991)) and S. 218, 102d Cong., 1st Sess. (reported May 14, 1991, by Senate Committee on Commerce, Science and Transportation and awaiting consideration by the full Senate), S. Rep. No. 93, 102d Cong., 1st Sess. (1991).

Commission, however, ignored the fact that NTIA has authority to release federal government spectrum at any time without Congressional authorization. In fact, the Communications Act of 1934, as amended (the "Communications Act")<sup>4</sup> and NTIA's express spectrum policies contemplate release of government spectrum when necessary to meet private sector demands for spectrum.<sup>5</sup>

More importantly, since the <u>NPRM</u> was adopted, NTIA has released a report indicating that spectrum in the 1.71-1.85 GHz band may be available for emerging technologies. Accordingly, the Commission should investigate, immediately, the availability of this government spectrum for new technologies. If such spectrum were available for emerging technologies, the Commission's proposal to displace current 2 GHz private fixed microwave licensees would become moot.

# 1. A March 1992 Report By NTIA Demonstrates The Possible Availability Of The 1.71-1.85 And 2.2-2.29 GHz Bands

In late March, 1992, after the adoption of the NPRM, NTIA released a draft report entitled "Federal Spectrum Usage of the 1710-1850 and 2200-2290 MHz Bands" ("the "Report"). The Report reveals that the frequencies at 1.71-1.85 GHz and 2.2-2.29 GHz (the "Government 2 GHz Band") are used for similar applications as, and are utilized far less extensively than, the frequencies the Commission has targeted for reallocation in this proceeding (the "Private 2 GHz Band").

<sup>4/ 47</sup> U.S.C. § 151 et seq.

<sup>5/</sup> See Section II.A.4.

Most facilities in both the Private and Government 2 GHz Bands are fixed point-to-point microwave systems and are used for similar applications. According to the Report, there are 5,155 fixed microwave installations in the Government 2 GHz Band, which are used for the same purposes as their counterparts in the Private 2 GHz Band -- high speed relaying, supervisory control, load control, telemetering, data acquisition, land-mobile radio dispatching, operations and maintenance. Report at 4-1.

More importantly, the Government 2 GHz Band is used far less than the Private 2 GHz Band as measured by total number of facilities, utilization per bandwidth and increased use during the last 10 years. The Report states that the Government 2 GHz Band supports the operation of only 7,790 facilities. Report at 2-1. By comparison, the Private 2 GHz Band supports 29,116 facilities nationwide. OET Study at p. 19. Thus, the Private 2 GHz Band supports more than three times the number of facilities supported by the Government 2 GHz Band.

The comparatively light use of the Government 2 GHz Band is further revealed by the growth statistics discussed in the Report. Use of the lower portion of the Government 2 GHz Band (1.7-1.85 GHz) has increased by about 400 installations per year since 1978 while use of the upper portion of the band (2.2-2.29 GHz) has increased by about 80 installations per year during the last 10 years. Report at 4-3, 4-19. This growth is snail-paced compared to growth in the private arena. According to the FCC's Annual Reports from 1978-1990, private fixed microwave facilities -- the majority of which are in the Private 2 GHz Band -- increased from 14,382 to 32,871, for an average annual increase of 1,537, which is more than three times the average annual increase in installations in the Government 2 GHz Band.

## 2. OET Should Investigate The Feasibility Of Using The Government 2 GHz Band For Emerging Technologies

The apparent underemployment of the Government 2 GHz Band revealed by the Report requires an investigation by OET as to the feasibility of that band for emerging technologies. Alternatively, OET should investigate whether the Government 2 GHz Band could be used as a home for displaced users of the Private 2 GHz Band. It would appear that relocating displaced 2 GHz microwave users to the 1.71-1.85 GHz Band would cause less disruption to on-going 2 GHz operations than relocating those users to higher frequencies. This is so because the propagation characteristics of both bands are nearly identical.

OET should also study the number and location of facilities operating in the Government 2 GHz Band, the technical operating parameters of those facilities, and the needs of existing licensees. See OET Report at 6. Much of this data is available in the Report; but the OET staff must analyze the Government 2 GHz Band in at least as comprehensive a manner as it analyzed the Private 2 GHz Band.

Of course, OET should also analyze the technical and economic feasibility of relocating users of the Government 2 GHz Band. While the Report discusses moving certain federal government facilities to bands above 7-8 GHz, Report at A-5, the costs and technical considerations associated with the relocation of government facilities should be analyzed.

<sup>6/</sup> Vanguard anticipates that relocating would effect all of its 75,000 customers, not only those served by Vanguard's 2 GHz hops.

OET should also analyze the cost (and technical feasibility) of relocating private fixed microwave users from the Private 2 GHz Band to the Government 2 GHz Band in order to provide a useful comparison of all potential relocation bands for displaced 2 GHz users.

The Report provides a good starting point for an analysis of the Government 2 GHz Band. The OET's expert technical staff, computer programs and spectrum data base make it uniquely qualified to perform the appropriate analysis of the Government 2 GHz Band. A careful and thorough analysis by OET of the Government 2 GHz Band will enable the public to comment on the feasibility of using that band for new technologies or as a home for displaced users of the Private 2 GHz Band. If the Commission's goal, as reiterated throughout the NPRM, is to clear spectrum in a manner that will minimize the impact on existing users, see NPRM at ¶¶ 6 and 27, it must investigate making underutilized government spectrum available for emerging technologies.

3. The Administrative Procedure Act Requires That The Commission Consider The Alternative Of Using Government Spectrum

The Commission's failure to investigate the feasibility of using federal government spectrum for emerging technologies (or as a new home for displaced 2 GHz users) could render the entire rule making proceeding unlawful under the Administrative Procedure Act, 5 U.S.C. § 551 et seq. (the "Administrative Act"). The Administrative Act deems agency action unlawful if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). This standard mandates that the Commission scrutinize all reasonable alternatives to its chosen course of action. City of Brookings Mun. Tel. Co. v. FCC, 822 F.2d 1153, 1169 (D.C. Cir. 1987) ("Commission's duty

to consider significant alternatives . . . inheres in the agency's broader responsibility for exercising its expertise in a reasoned manner") (citing Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 48-49 (1983)); Office of Communication of United Church of Christ v. FCC, 707 F.2d 1413, 1426 (D.C. Cir. 1983) (court will "look carefully at the Commission's reasoning to ensure that all relevant factors and available alternatives were given adequate consideration in the course of the rule making proceedings"). To date, the Commission appears to have failed to make any meaningful attempt to determine the viability of utilizing the Government 2 GHz Band, despite the apparent prospect of using the Government 2 GHz Band for emerging technologies or as a home for displaced 2 GHz users.

This failure to act is particularly striking in light of the comparative underutilization of federal government spectrum as revealed in the Report. Moreover, the principle underlying the "Emerging Telecommunications Technologies Act" is that underutilized government spectrum can -- and should -- be made available for emerging technologies. See House Comm. on Energy and Commerce, Emerging Telecommunications Technologies Act of 1991, H. Rep. No. 113, 102d Cong., 1st Sess. 14 (June 18, 1991). Accordingly, use of federal government spectrum is a reasonable alternative that the FCC is obligated to fully investigate in this rule making proceeding.

4. The FCC And NTIA Have Authority To Reallocate Government Frequencies For Emerging Technologies Or For Displaced Users Of The Private 2 GHz Band

The Commission indicated in the <u>NPRM</u> that it did not consider federal government spectrum in its spectrum reserve proposal because that spectrum is under the jurisdiction of NTIA and it is uncertain when government spectrum will be made available

under the Emerging Telecommunications Technologies Act. If enacted the proposed legislation would require NTIA, with the FCC, to identify (within a 2 year time period) underutilized government for reallocation for emerging technologies. Thus, contrary to the tone set in the NPRM, reallocation of government spectrum pursuant to the Emerging Telecommunications and Technologies Act is not "econs away."

Accordingly, the FCC should take all appropriate steps to utilize government spectrum before it displaces current licensees.

B. Should The Commission Determine That It Has No Alternative But To Reallocate The Private 2 GHz Band To Emerging Technologies, It Should Modify And Clarify The NPRM

As stated above, Vanguard believes that the Commission has a duty to investigate the feasibility of using the Government 2 GHz Band for emerging technologies. If the Commission, after careful consideration, decides that the Government 2 GHz Band is not a viable option for emerging technologies, the Commission should consider the following in the rule making process.

Moreover, NTIA, under the Communications Act, can release government spectrum without Congressional authorization. Thus, it is possible for NTIA to release the Government 2 GHz Band without regard to passage of the Emerging Telecommunications and Technologies Act. According to the NTIA Manual, the federal government is required to "make effective, efficient, and prudent use of the radio spectrum in the best interest of the Nation." Manual of Regulations and Procedures for Federal Radio Frequency Management, ch. 4 (May 1989 ed., rev. through May 1990) ("NTIA Manual") at § 2-1, note 11 (emphasis added). See Report, supra, note 26 at 17-19.

In accordance with this policy, NTIA has the flexibility (and perhaps a duty) to make federal government spectrum available to the FCC to meet spectrum demands by commercial licensees.

1. Applications For Fixed Microwave Systems In The 2 GHz
Band Filed After The Adoption Of The NPRM Should Not
Be Granted On A Secondary Basis Only

As a preliminary matter, the Commission must clarify the meaning of ¶ 23 of the NPRM. That paragraph provides:

First, we wish to ensure the availability of the existing vacant 2 GHz spectrum for the initial development of new services and to discourage possible speculative fixed service applications for this spectrum. We therefore will continue to grant applications for fixed operations in the proposed new technologies bands; however, applications for new facilities submitted after the adoption date of this Notice will be granted on a secondary basis only, conditioned upon the outcome of this proceeding. This will provide some accommodation for the needs of fixed microwave users, particularly in less congested areas.

As discussed below, one interpretation of ¶ 23 is that the Commission has merely proposed a transition plan and now seeks comment for implementation upon the conclusion of this proceeding. Another interpretation of ¶ 23, however, is that the Commission has already changed its present application processing rules retroactive to the date that the Commission adopted the NPRM, January 16, 1992, and will grant applications for new microwave facilities on a secondary basis only. If the latter interpretation is correct, as Vanguard has assumed, then the Commission has chosen an odd means to "accommodate" current 2 GHz licensees who need to expand their facilities to meet increasing demand.<sup>9</sup>

<sup>8/</sup> The Commission should also clarify what it means by "secondary basis." Presumably, "secondary basis" means that new 2 GHz fixed microwave licensees would have to yield to PCS and other emerging technologies in the event of reported interferences.

# a. The Commission's Justification For "Grandfathering" 2 GHz Fixed Microwave Applications Is Unwarranted

The Commission's reason for the grandfathering provision appears to be its desire "to discourage possible speculative fixed service applications for [the 2 GHz] spectrum" (NPRM ¶ 23) and to prevent "windfalls for the incumbent 2 GHz licensees" during market-based negotiations with the would-be PCS licensees (NPRM note 20). The Commission, in essence, balanced the future interests of prospective "emerging technology" licensees against the immediate interests of cellular (and other) carriers and concluded that the latter are inferior to the former.

Vanguard acknowledges the Commission's interest in providing for an orderly transition if the Private 2 GHz Band ultimately is selected for emerging technologies. However, the decision to make only secondary grants, pending the outcome of this proceeding, unjustifiably discriminates against existing cellular carriers who may have a need to expand existing facilities since the Commission's stated justification for its position -- the need to discourage speculative filings and to shield new providers from incumbent licensees seeking windfalls -- is misplaced and unrealistic.

In the mobile services, for example, an applicant proposing a high-power station with a high-elevation, omnidirectional antenna is able to tie up a frequency for a radius of perhaps 70 miles or more. In contrast, Part 21 of the Commission's Rules, governing applications in the common carrier point-to-point microwave radio service, generally permit only low-power stations with narrow beamwidth antennas transmitting along clearly defined paths of relative short distance. Thus, likelihood of a speculative filing tying

<sup>2/</sup> The Commission must set forth, explicitly, what uses constitute emerging technologies.

up a significant amount of 2 GHz spectrum over a substantial area is remote even if some speculative filings do occur.

Moreover, in the event some speculative filings should occur, there are other safeguards the Commission may employ to preclude the grantees from seeking windfalls from prospective licensees. The Commission, for example, could preclude the prospect of mass speculative filings without disruption to the communications industry by reducing the present 18-month construction period for new fixed microwave facilities in the 2 GHz Band to 9 or 12 months and by instituting a tough policy of not granting extensions except in the most compelling circumstances -- and only then when it is clear that no speculative motivation is present.

Finally, the possibility of some few unscrupulous incumbent licensees attempting to take undue advantage of PCS licensees during market-based negotiations is insufficient to outweigh the interests of cellular carriers who have an immediate need for 2 GHz spectrum to meet the increasing demand for important and proven cellular services.

If the Commission nonetheless feels that secondary grants are essential, this policy should not be implemented for a period of at least 12 months from the release of the NPRM. The January 16, 1992 cutoff date is unfair to cellular providers whose 2 GHz plans were already in progress as of that date but who had not yet made application filings. This procedure would recognize the needs of existing carriers whose plans would otherwise have to be changed substantially with concomitant in-service delays and additional financial outlays (all at the public's expense) without hindering the introduction of emerging technologies. Finally, if the Commission feels compelled to cling to the interim policy

determination announced in the <u>NPRM</u>, it should exempt <u>bona fide</u> existing telephone and cellular carriers from secondary status grants.

2. The Commission Has The Power To Issue Tax Certificates With Respect To This Instant Change In FCC Policy And Should Issue Tax Certificates To All Fixed Microwaves Licensees That Voluntarily Migrate From The Private 2 GHz Band

If the Commission decides it is necessary to clear the Private 2 GHz Band, it must do everything within its power to minimize the financial burden on displaced users. To that end, the Commission must exercise its authority to issue tax certificates in favor of all licensees moving before the end of the transition period. In general, tax certificates would enable displaced licensees, who voluntarily relocate in furtherance of the Commission's policy, to defer any gain recognized on a sale of their 2 GHz equipment, so long as the selling party reinvests the proceeds in property of a similar nature to the property sold. 26 U.S.C. § 1071(a). Since selling parties would have to reinvest the sale proceeds in order to defer gain, issuing tax certificates would directly impact the amount invested in replacement equipment. Increased investment in replacement equipment, in turn, would minimize the disruption of current 2 GHz services. [19]

<sup>10/</sup> The Commission has ample authority to issue tax certificates to non-broadcast licensees. The Internal Revenue Service has sanctioned the issuance of tax certificates in numerous non-broadcast settings. Rev. Rul. 73-73, 1973-1 C.B. 371 (cable television systems); PLR 8124015 (MDS systems). Moreover, issuing tax certificates in the present situation is analagous to the Commission's issuance of tax certificates to non-wireline cellular providers in connection with the Commission's effort to consolidate control and ownership into efficient and competitive enterprises. 58 RR 2d 1443 (1985). In that proceeding, where many cellular providers voluntarily exchanged partnership interests, the Commission argued that a broad reading of IRC § 1071 was appropriate because of the statute's general intent and the radical change in the telecommunications industry since the statute was enacted. Id. The Commission's authority was not challenged there. Nor will its authority be challenged here.

The NPRM suggests that tax certificates may be made available to only those fixed microwave users who migrate to non-radio media, such as fiber optics. This policy is inappropriate for several reasons. First, it penalizes those communication systems that can not easily be relocated to alternative media. More importantly, it is at odds with the Commission's stated objectives of clearing the 2 GHz Band quickly and painlessly. It is clear that the band would clear faster with fewer negotiation problems if tax certificates were issued to all displaced licensees. Accordingly, the Commission should issue tax certificates to all displaced licensees.

This Commission's apparent position on tax certificates underscores a more fundamental defect in the Commission's reallocation scheme: the Commission assumes that a significant number of displaced licensees can easily migrate to non-radio media. Though wire based and fiber optic technology can sometimes be a substitute for microwave facilities, these alternatives are costly, particularly on less heavyly trafficketed routes, which is why Vanguard and other cellular carriers have elected to use the less expensive microwave facilities. The disadvantages of wire and fiber based technology include delays in getting new facilities on line, loss of flexibility in network architecture, and lack of reliability, as well as the additional continuing expenses of leasing, rather than owning, network links. Moreover, in the rural areas, fiber is generally not available and even wire-based network links may be very difficult to obtain. Nor is constructing a wire-based network an option. Though Vanguard has not made any calculations, Vanguard asserts that constructing a wire-based netowrk would dwarf the \$24 million dollar cost of relocating to higher frequences. For these reasons, the limited availability of alternate media should not guide the Commission in this rule making.

## 3. The Commission Must Place No Restrictions On The Financial Arrangements Between Ousted And Insurgent Licensees

The NPRM seeks comment on what limitations, if any, the Commission should place on the financial arrangements between incoming and existing users. Vanguard has a single comment in this respect: the Commission should place no restrictions on these financial arrangements.

The cost of moving to higher frequencies is staggering. Many of the transmission paths for existing 2 GHz facilities are much too long for higher frequency transmissions. Twenty - and even thirty-mile-long transmission paths are common at 2 GHz, but are generally unacceptable in higher bands because of signal attenuation. Therefore, moving up the band would require adding new transmitter sites. Acquiring land and building new transmitter towers, however, is nearly impossible in many areas because of environmental problems, zoning concerns, and the lack of undeveloped land. Even where new sites are theoretically available, the cost of land acquisition and site construction would be enormous. As noted above, Vanguard estimates that relocating pursuant to the NPRM will cost Vanguard \$24 million.

The Commission is correct to propose a market-based solution to this dilemma
-- one that allows new spectrum uses to displace existing users only if they pay (at a
minimum) the costs of moving the affected 2 GHz user to new spectrum (or wire facilities).

This approach will allow new technologies to get to the market where -- and only where -the result is a more economical use of the frequencies. The Commission must not
undermine its market-based approach by placing limitations on recoverable costs.

Moreover, an unobstructed market approach is wholly consistent with the Commission's goal of minimizing the burden on affected services. Cellular users will likely bear the burden of a costly relocation of cellular facilities, either through increased fees or less reliable service. Allowing displaced users to recover the maximum dollar amount the market will bear will maximize the resources available for investment in replacement equipment, which, in turn, will minimize the disruption of current services.

Presumably, the Commission's request for comments on restricting negotiations is related to the Commission's concern that incumbent licensees may receive a windfall from negotiations. For reasons stated above, this seems very unlikely. Besides, the cost to incumbent 2 GHz licensees to move to different equipment, the cost of personnel to negotiate these matters, training personnel on new equipment, and the cost of test equipment and additional spare parts would aggregate to eliminate any windfall that any ousted user might receive for its frequency.

4. The Commission Must Do More To Accommodate Ousted 2 GHz Fixed Microwave Users Than Merely Waiving The Blanket Eligibility Requirements

Apart from suggesting that (1) it may issue tax certificates and (2) it will allow (to some extent) current 2 GHz users to negotiate private arrangements with insurgents, the Commission proposes no relief for private microwave users wishing to install new microwave systems or to expand existing 2 GHz systems. The Commission's relief is limited to waiving eligibility requirements "for existing 2 GHz fixed microwave users" in order to permit relocation to any of the higher bands. NPRM at ¶ 20. The Commission must do more.

At a minimum, the Commission must also take measures to convince businesses that future investment in microwave equipment is a safe investment. What happens if emerging technologies need more frequency 10 years from now? The Commission must make some commitment that bands to which current users relocate are safe from reallocation for some period fixed of time.

As a more practical matter, the Commission must identify frequencies sufficient to accommodate <u>all</u> existing microwave stations. On March 31, 1992, the Utilities Telecommunications Council filed a <u>Petition For Rule Making</u> ("UTC Rule Making Petition"). The UTC Rule Making Petition, after a detailed analysis, concludes:

the vast majority of the spectrum that the Commission cites as being the primary relocation bands for displaced 2 GHz users is allocated to common carrier services and, as such, is not suitable replacement spectrum, as presently configured, for the more than 22,000 private microwave facilities currently licensed in the 2 GHz band.

### UTC Rule Making Petition at 9.

Vanguard urges the Commission to investigate UTC's assertions. Obviously, if the Commission has failed to identify frequencies sufficient to accommodate <u>all</u> existing 2 GHz users, then the entire scheme outlined in the <u>NPRM</u> is unworkable.

5. The Commission Must Further Investigate The Possibility Of Locating Emerging Technologies To Other Bands Between 1 & 3 GHz

The Commission based its decision to relocate private microwave facilities operating in the 1.85-2.20 GHz Band almost entirely on the OET Study. Yet the NPRM does not expressly invite comment on the choice of this band (as opposed to other bands in the 1-3 GHz range). As emphasized in the Petition For Issuance Of Further Notice Of Proposed Rule Making submitted by Utilities Telecommunications Council ("UTC Petition"),

the OET study is nothing more than an internal staff report prepared at the request of the Chairman of the Commission. Yet the Commission relied almost exclusively on that report when designating the band on which new technologies would locate. Thus, to the extent comments reveal the OET is deficient, so too is the Commission's decision.

As the UTC Petition argues, the Commission (because it relied exclusively on the OET study) did not adequately address the possibility of relocating current users of the 2.50-2.69 GHz band ("2.5 GHz"), even though that frequency band satisfies all of the Commission's stated criteria. Because that band -- the 2.5 GHz band -- satisfies the Commission's criteria, OET conducted a <u>cursory</u> cost/benefit/feasibility study to determine if that band should be recommended as the emerging technologies band. Because that analysis appears to be inadequate, Vanguard concurs in the views expressed in pages 9-18 of the UTC Petition and urges the Commission to study the analysis provided therein.

### 6. A Ten-Year Transition Period Is Insufficient

The NPRM proposes a 10-15 year transition period, during which existing 2 GHz users will share the reallocated frequencies with new technologies. After this transition period, existing 2 GHz users will either be required to give up their frequencies or operate on a secondary basis to new users. A 10-15 year transition period, according to the NPRM, represents the useful life of existing equipment.

The transition period should be at least 15 years, and probably 20 years, if the Commission's goal is to provide a transition period equal to the useful life of equipment currently in service. A transition period of twenty years helps cellular carriers avoid serious disruptions or delays to the public. Moreover, in order for the transition period to be meaningful, no limit should be placed on the ability of a licensee to modify or change

existing facilities. Cellular network architecture must be flexible in order to adapt to changing demands for cellular services. As a consequence, changes to microwave facilities can occur regularly. If a cellular carrier cannot modify its microwave facilities without losing its right to the transition period, then the transition period has little practical benefit.

Moreover, many of the currently licensed non-wireline cellular systems are located in MSAs or RSAs where there is less overall spectrum congestion there in the largest markets. It is also less likely that these areas will attract PCS providers during the infancy of the technology. Therefore, in some MSAs and RSAs, there is little potential for interference between existing facilities and emerging technology licensees. Accordingly, it should be possible for the 2 GHz Band to remain available on a co-primary basis indefinitely in the less-congested MSAs and RSAs.

### III. CONCLUSION

The Commission's NPRM in ET Docket 92-9 provides only a forum in which the public can help the Commission designate spectrum for emerging technologies. Now, the Commission must investigate, immediately, the possibility of using underemployed government spectrum as the emerging technologies band. If the Commission ultimately determines that current 2 GHz private fixed microwave users will eventually have to move to higher bands to accommodate emerging technologies, the Commission must do everything within its power to relieve the burden of this costly relocation. Otherwise, the Commission's effort to introduce new communications services will have the ironic consequence of slowing the growth of cellular and other valuable and proven communications services.

Respectfully submitted,

VANGUARD CELLULAR SYSTEMS, INC.

By:

James F. Rogers
Gregory P. Broome

LATHAM & WATKINS 1001 Pennsylvania Ave., N.W. Suite 1300 Washington, DC 20005-2404 (202) 637-2200

#### DECLARATION

- I, Richard C. Rowlenson, do hereby state under penalty of perjury as follows:
- I am Senior Vice President and General Counsel of Vanguard Cellular Systems, Inc. ("Vanguard").
- I have reviewed the foregoing Comments of Vanguard Cellular Systems, Inc. in respect to ET Docket No. 92-9. 2.
- The facts therein of which I have personal knowledge are true and correct. All other facts are true and correct to the best of my knowledge and belief 3.

Date: June 5, 1992

Richard C. Rowlenson

### CERTIFICATE OF SERVICE

I, Gregory P. Broome, an attorney in the law firm of Latham & Watkins, do hereby certify that a true and correct copy of the foregoing Comments of Vanguard Cellular Systems, Inc. has been sent to the following on this 5th day of June, 1992:

Chairman Alfred C. Sikes Federal Communications Commission 1919 M Street, N.W. Room 814 Washington, D.C. 20554

Commissioner James H. Quello Federal Communications Commission 1919 M Street, N.W. Room 802 Washington, D.C. 20554

Commissioner Sherrie P. Marshall Federal Communications Commission 1919 M Street, N.W. Room 826 Washington, D.C. 20554

Commissioner Andrew D. Barrett Federal Communications Commission 1919 M Street, N.W. Room 844 Washington, D.C. 20554

Commissioner Ervin S. Duggan Federal Communications Commission 1919 M Street, N.W. Room 832 Washington, D.C. 20554

Ralph Haller, Chief Private Radio Bureau Federal Communications Commission 2025 M Street, N.W., Room 5002 Washington, D.C. 20554

Dr. Thomas P. Stanley, Chief Office of Engineering and Technology Federal Communications Commission 2025 M Street, N.W., Room 7002 Washington, D.C. 20554 Dr. Bruce A. Franca, Deputy Chief Office of Engineering and Technology Federal Communications Commission 2025 M Street, N.W., Room 7002 Washington, D.C. 20554

Will McGibbon, Chief Spectrum Engineering Division Office of Engineering and Technology Federal Communications Commission 2025 M Street, N.W., Room 7130 Washington, D.C. 20554

William Torak, Deputy Chief Spectrum Engineering Division Office of Engineering and Technology Federal Communications Commission 2025 M Street, N.W., Room 7102 Washington, D.C. 20554

David Siddall, Chief Frequency Allocation Branch Office of Engineering and Technology Federal Communications Commission 2025 M Street, N.W., Room 7102 Washington, D.C. 20554

H. Franklin Wright, Chief Frequency Liaison Branch Office of Engineering and Technology Federal Communications Commission 2025 M Street, N.W., Room 7322 Washington, D.C. 20554

Thomas Mooring
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W., Room 7330
Washington, D.C. 20554

Gregory P. Broome